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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,605	12/08/2003	Robert Worth Love		5393

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EXAMINER

HSIEH, SHIH YUNG

ART UNIT PAPER NUMBER

2837

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,605

Applicant(s)

LOVE, ROBERT WORTH

Examiner

Shih-yung Hsieh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/4/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

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1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show diameter (d1), diameter (d2), and axial length (L1) for calculating length (L2) and (L3) to indicate the process in the drawings as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the divisible sections

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for said rims, said cup-chambers, said backbore-chambers detachably maintained together by fastening means in claim 3, the divisible sections for top-sections, said backbore-chambers detachably maintained together by said fastening means in claim 4, the divisible sections for said rims, bottom sections detachably maintained together by said fastening means in claim 5, second means in claim 8, third means in claim 9, fifth means in claim 11, seventh means in claim 13, and eighth means in claim 16 (means plus function is structural limitation of a device and must be described in the specification and shown in the drawings), and an external decorative region for said mouthpiece bodies in claim 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Claims 3-5, 7-8, 9-11, 14, and 16 are objected to because of the following informalities: the following phrases are indefinite:

Claims 3, 5, 8, and 11, line 8, "may be";

Claim 4, line 9, "may be";

Claim 14, line 9, "can be";

Claim 16, line 5, "may", line 8, "can be".

The following terms lack antecedent basis:

Claim 4 and 5, "said fastening means".

Claim 7, line 3, "frequently" does not make sense and should be "frequency".

Claim 9 claims a "12 step method". A method claim must contain active method steps such as in claim 12, and must contain 12 active method steps as claimed.

Claim 10, the preamble of claim 10 "The 12-step method " is not consistent with claim 7 which claim 10 depends on. In addition, claim 7 is not a method claim. A method claim must contain active method steps such as claim 12.

Appropriate correction is required.

4. Claims 7, 9, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 9, claim 9 claims a "12 step method". A method claim must contain active method steps such as in claim 12, and must contain 12 active method steps as claimed. In this case, it is not clear whether the claim is a method or apparatus claim.

Regarding claims 7 and 10, the preamble of claim 10 "The 12-step method " is not consistent with claim 7 which claim 10 depends on. In addition, claim 7 is not a method claim. A method claim must contain active method steps such as claim 12. The two claims neither provides structural limitations nor provides method steps to define the invention.

Regarding claim 11, it is not known what is the empirical method without method steps to clearly define the invention.

Claim 12 is a method claim and must provide the phrase "the method steps of:" and followed by the active steps as claimed. The phrase "sixth means of" is confusing in that it is not clear whether claim 12 is a method claim.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 6-7, 13-14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bach Mouthpieces (applicant's IDS)

Regarding claim 1, Bach Mouthpieces discloses a multiplicity of sets of brass-wind mouthpieces comprises a plurality of mouthpieces bodies each having separate lengths (Mezzo Soprano trumpets in Bb or C, and Alto horn in Eb), said plurality of mouthpieces bodies each having said separate volumetric cup-chamber sizes, respectively (the drawings shown the two mouthpieces having separate volumetric cup-chamber sizes), said plurality of mouthpieces bodies each having said separate lengths and said separate volumetric cup-sizes juxtaposed so: shorter separate lengths have larger volumetric cup-chamber sizes, respectively, longer separate lengths have smaller volumetric cup-chamber sizes, respectively (the drawings show this limitations).

Regarding claim 2, Bach Mouthpieces disclose the claimed invention (drawings and chart).

Regarding claims 6 and 7, Bach Mouthpieces inherently discloses the substantially similar volumetric size for combined regions of said cup-chamber and said backbore-chamber, and substantially similar fundamental frequency of resonance.

Regarding claims 13 and 14, Bach Mouthpieces inherently discloses the invention (Drawings and chart).

Regarding claim 16, the claim contains most functional language without any structural limitation except applying the principle of inverse proportionality for the mouthpieces that is discloses by the Bach drawings as stated above.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bach Mouthpieces in view of Shepley (4,395,933).

Regarding claims 3-5, Bach Mouthpieces discloses the claimed invention except that divisible sections for rims, cup-chambers/top sections, backbore-chambers/bottom sections detachably maintained by fastening means.

Shepley teaches a mouthpiece having divisible sections for rims, cup-chambers/top sections, backbore-chambers/bottom sections (Fig. 1) detachably maintained by fastening means (20, 38, 18) for varying the length of the separate sections. It would have been obvious to one having ordinary skill in the art to modify Bach Mouthpieces as taught by Shepley to include divisible sections for rims, cup-chambers/top sections, backbore-chambers/bottom sections detachably maintained by fastening means for the purpose of varying the length of the separate sections.

Regarding claim 8, Bach Mouthpieces discloses the claimed invention except means of making small adjustment to each mouthpiece body. The rest of the claim recites intended use.

Shepley teaches making small adjustment to each mouthpiece body (col. 1, lines 64-65) for changing the resistance of air (col. 1, line 65). It would have been obvious to one having ordinary skill in the art to modify Bach Mouthpieces as taught by Shepley to

include means of making small adjustment to each mouthpiece body for the purpose of changing the resistance of air.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bach Mouthpieces in view of Lorenzini (4,258,605).

Regarding claim 15, Bach Mouthpieces discloses the claimed invention except an external decorative region for said mouthpiece bodies.

Lorenzini teaches a mouthpiece (14) having an external decoration (18) for said mouthpiece for decorative purpose (col. 2. line 19). It would have been obvious to one having ordinary skill in the art to modify Bach mouthpieces as taught by Lorenzini to include an external decorative region for said mouthpiece bodies for the purpose of providing decoration.

10. Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claim 12 is allowable over the prior art for at least the reason that the prior art fails to reasonably teach or suggest in claim 12 that the steps of experimentally varying cup-chamber length $L1$ and backbore length $L2$ until volumetric chamber sizes of $v2+v3=v1$, as calculated by said computer aided design software program, where $L1+L2$ equals $L3$ as set forth in the claimed combination.


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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-yung Hsieh whose telephone number is 571-272-2065. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

syh


SHIH-YUNG HSIEH
PRIMARY EXAMINER